

Application No 10/568,307
Amendment After Final dated November 13, 2009
Reply to Final Office Action dated September 15, 2009

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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-15. (cancelled)

16. (previously presented) An intervertebral implant for the lumbo-sacral joint, the intervertebral implant comprising:

a spacer adapted to fit between the fifth lumbar vertebra and the sacral vertebra articulated thereto; and

a strap; and

wherein said spacer comprises a body, said body comprises a top end face and a bottom end face opposite the top end face;

wherein the top end face comprises a groove that extends along a midplane of the spacer, and

wherein the groove comprises a first side and a second side, wherein between the first side and the second side the groove is adapted to receive the spinous process of said lumbar vertebra,

wherein the first side of the groove comprises a first opening,

wherein the second side of the groove comprises a second opening,

wherein a first end of the strap is passed into the first opening of the first side of the groove,

wherein the second end of the strap is passed into the second opening of the second side of the groove,

wherein the bottom end face comprises a longitudinal housing, said longitudinal housing extends orthogonal to the groove, and

wherein the longitudinal housing is concave to receive and rest directly on a top portion of the convex sacral vertebra;

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wherein the body of said spacer presents first and second opposite side faces into which said groove opens out, and presents at its bottom end an extension having a first side extending along the first side face and a second side that is opposite from its first side and that defines a setback relative to the second side face of the body of the spacer, and wherein the spacer includes a tab of width narrower than the width of the body of the spacer in a direction orthogonal to the midplane of the spacer, connected to the body of the spacer, and extending facing the second side of said extension in such a manner that an inside face of said tab facing the second side of the extension cooperates with said second side to define the outline of said housing.

17. (previously presented) The implant according to claim 16, wherein a section of said housing in the midplane of the spacer is generally U-shaped, and a midplane of said housing is not orthogonal to the midplane defined by the bottom of said groove.

18. (previously presented) The implant according to claim 17, wherein the midplane of said housing is inclined relative to the midplane defined by the bottom of said groove by an angle lying in the range of 40° to 80° .

19. (previously presented) The implant according to claim 16, wherein the inside face of said tab is convex.

20. (previously presented) The implant according to claim 16, wherein a zone of the inside face of the tab is inclined relative to the midplane defined by the bottom of said groove by an angle A lying in the range of 60° to 80° .

21. (previously presented) The implant according to claim 20, wherein the angle A is about 70° .

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22. (previously presented) The implant according to claim 16, wherein a portion of the second side of the extension is inclined relative to the midplane defined by the bottom of said groove at an angle B lying in the range of 40° to 70°.

23. (previously presented) The implant according to claim 22, wherein the angle B lies in the range of 50° to 60°.

24. (previously presented) The implant according to claim 16, wherein a notch is formed in said extension facing said tab.

25. (cancelled)

26. (previously presented) The implant according to claim 16, wherein the spacer further comprises second fastener means for fastening the body of the spacer to said sacral vertebra.

27. (previously presented) The implant according to claim 26, wherein said second fastener means comprises a strap and a fastener system secured to the body of said spacer.

28. (previously presented) The implant according to claim 27, wherein a hold is formed in the body of said spacer and opens out into the bottom of said housing in the vicinity of said tab, and is suitable for receiving a portion of the strap.

29. (currently amended) A method of limiting the displacement of the fifth lumbar vertebra relative to the sacral vertebra articulated to said fifth lumbar vertebra, the method comprising:

providing an intervertebral implant comprising:

a spacer adapted to fit between the fifth lumbar vertebra and the sacral vertebra articulated thereto; and

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a strap; and

wherein said spacer comprises a body, said body comprises a top end face and a bottom end face opposite the top end face;

wherein the top end face comprises a groove that extends along a midplane of the spacer, and

wherein the groove comprises a first side and a second side, wherein between the first side and the second side the groove is adapted to receive the spinous process of said lumbar vertebra,

wherein the first side of the groove comprises a first opening,

wherein the second side of the groove comprises a second opening,

wherein a first end of the strap is passed into the first opening of the first side of the groove,

wherein the second end of the strap is passed into the second opening of the second side of the groove,

wherein the spacer comprises an extension having a first side and a second side, and a tab spaced from the extension such that a longitudinal housing formed in the bottom end face is defined between the second side of the extension and a side face of the tab facing the extension,

wherein said longitudinal housing extends orthogonal to the groove, and

wherein the longitudinal housing is concave to receive and rest directly on a top portion of the convex sacral vertebra; and

putting ~~[[an]]~~ the intervertebral implant according to ~~claim 15~~ into place between the fifth lumbar vertebra and the sacral vertebra, wherein the spacer of the implant is caused to rest directly on the top portion of the sacral vertebra in such a manner that the top portion is received in said longitudinal housing of the spacer.

30. (previously presented) A method of limiting the displacement of the fifth lumbar vertebra relative to the sacral vertebra articulated to said fifth lumbar vertebra, the method comprising putting an intervertebral implant according to claim 16 into place between the fifth lumbar vertebra and the sacral vertebra, wherein the spacer of the implant is caused

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to rest directly on the top portion of the sacral vertebra in such a manner that the top portion is received in said longitudinal housing of the spacer.

31-32. (cancelled)